Hopton. 1610.

An Almanack and Pro-
nostication, for this present
yeare, 1610.

Being the second from the
leape yeare.

Referred most especially to the
meridian & latitude of the wor-
thy towne of Shrewsbury, aptly
serving all the adiacent shires,
indifferently the South parts
of Great Brittaine, and generally
the whole continent.

By Arth. Hopton, Gent.

Sapiens Dominabitur Astris.

Imprinted at London for the
company of Stationers.

To know the houre of the day without clock or dyall.

TAke an Arrow, Ruler, or what stick you will, so it bee some thing straight, and of what length you will, so it bee indifferently deuided into 12. equall parts, 12 of your thumbs breadth may well suffice, so doth your thumbe deuide the same.

Now when you would know the houre of the day, the sunne shining, erect your ruler vpon some plaine superficies lying leuell, so that it may hang or stand perpendicular vpon the leuelled surface, which you may easily doe obseruing the directions in my Almanack 1608.

Then note the length of the shadow of the said rule, and at either end thereof make a marke: now take your rule and measure the length of the said shadow before noted, and see how many of the equall parts of your rule it conteines, then resort vnto the tables placed in the head of each month, and there choose the table answering to your moneth, and also the day of the moneth, or the neerest you can finde, & agreeing with the day of the moneth right wards finde the number of equall parts which the length of the shadow conteined: then if your obseruations were before noone, you shall finde the houre of the day in the top of the table, if in the afternoone, in the foote, as is plaine by the inscriptions. And note that the dayes of the moneth be placed vpon the leaft hand, each table thrise, as in Aprill, 11 21. 30.

Example. The 21. of April in the forenoone, I finde according to the former instructions the length of the shadow to conteine 38. parts of my rule, which is three times his length, and $\frac{2}{12}$ parts, or two parts ouer, which 38. parts hauing found in my table answering to the 21 of April. I find ouer the head thereof ẏ figure 6. which sheweth it was iust sixe of the clock before noone like wise had it beene 6 if your obseruation had beene after noone: so of any other, and for want of the iust day of the month, or true parts of ẏ shadow, take the neerest by proportion: the same may the hodepor or traueler do, if he first stand vpright and note the length of his shadow and then measure it by his strides, calling euery stride 12. parts and so enter the table as before.

English Kalender for this Iulian or Soſigenian yeare. 1610.		Romaine Kalender for t' is Lilian or Gregorian yeare. 1610.	
The golden number	15	Aureus numerus	14
The circle of the ſunne.	23	Cyclus Solaris	23
Dominicall letter	G	Litera Dominicalis	C
The Romain Indiction	8	Indictio Romana	8
The Epact	15	Epacta	5
From Chriſtmas daye to Shrone-ſunday or Quinquageſima, 7. weekes, 6. dayes.		Interuallum minus, ſiue numerus hebdomadarum et dierum inter natalem Domini, et eſto mihi, 8. hebd 2. dier.	
Quadrageſima or firſt ſunday in Lent.	Febr. 25	Quadrageſima	Feb. 28
Eaſter day	April. 8	Dominica paſchatis.	Apr. 11
Aſcenſion day	May. 17	Aſcentio Domini.	May. 20
Whitſunday	May. 27	Pentecoſte	May. 30
Aduent ſunday	Decemb. 2	Aduentus Domini.	Nou. 28
Betwixt Trinity & Aduent ſunday.	weeks. 25	Dominicæ poſt Trinitatis,	24.

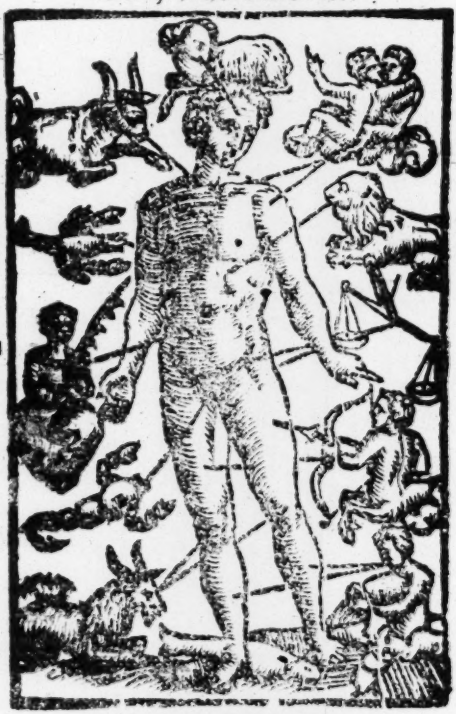
As for the fixed feaſts of Saints dayes, they remaine ſtill vpon the ſame day of the moneth in the new reformed Romain kalender, as they doe in this our Engliſh kalender. And as for this Romaine Indiction or indictionall circle, it hath no vſe in our Kalender at this day, it is a number of 15. yeares, which in olde time did ſhew what yeare tribute was to be paide to the Romaines, and likewiſe how many yeares it was ſince the ſolution of. trebute, ordeined by Octauius Auguſtus, when moſt of the world was ſubiect to the Romaine Empire, who for the eaſe of the remote, would haue it paide but euery fifth yeare: ſo that the firſt fiue yeares they pay golde, ad Dominationis typum, the next fiue ſiluer, ad ſtipendia militum, and in the end of the laſt fiue yeares Iron, ad armorem reparationem.

The Anatomy of mans body, and the gouernment of the members thereof by the Moone according to her course in the xii signes of the Zodiack.

Aries, the head and face.

Taurus, The neck & throate

Gemini, the armes & shoulde.



Cancer, Breast & stomacke.

Leo, Hart and back.

Virgo, Guts and belly.

Libra. Reynes & loynes.

Scorpio, Secret & members

Sagitta-rius. Thighes.

Capri-cornus. The knees.

Aqua-rius, The Legges.

Pisces. The feete.

Aries head, Taurus neck, Gemini armes require,
Cancer breast, Leo heart, Virgo guttes desire:
Libra loines, Scorpio secrets, Sagitarius thighes,
Capricorne knees, Aquarius legs, and Pisces feete supplies.

Ianuarie

Houres before noone.		12	11	10	9	8
Length or parts of shadow for the	10. day	26	39	49	83	550
	20. day	32	34	42	65	209
	30. day	27	29	35	119	sun set.

Houres after noone.				1	2	3	4

1	a	Circumcision.	11	Les. 16	
2	b	Octa. Steph.	12	Leo. 29	
3	c	Octa. of Joh	13	Vir. 13	
4	d	Octa. Innoc.	14	Vir. 25	☾ Last quarter the first daye. at ix. of the clock 52. minutes at night.
5	e	Edwa. depos.	15	Lib. 8	
6	f	Epiphany.	16	Lib. 21	
41 7	g	1 sun. af. Epi.	17	Sco. 3	
8	a	Lucian priest	18	Sco. 15	
9	b	Agapit virg.	19	Sco. 27	
10	c	Sol in Aquar.	20	Sag. 9	
11	d	Igne Pope.	21	Sag. 21	● New moone the viii. day, at eleuen of the clock & 53. min. at night.
12	e	Archad. mar.	22	Cap. 3	
13	f	Hillary bish.	23	Cap. 15	
14	g	2 sun. af. Epi	24	Cap. 28	
42 15	a	Maurice.	25	Aqu. 10	
16	b	Marcellus.	26	Aqu. 23	
17	c	Antho. depos.	27	Pisce. 6	
18	d	Prisca virg.	28	Pis. 19	☽ First quarter the xvii. day, at foure of the clocke & 48. minutes in the morning.
19	e	Wolstan. bish	29	Aries. 3	
20	f	Octab. Hillar.	30	Arie. 15	
43 21	g	3. sun af. Epi.	31	Taur. 1	
22	a	Vincent mar.	Fe	Tau. 15	
23	b	Terme begin	2	Tau. 30	
24	c	Timothy.	3	Gem. 14	
25	d	Cõu. of Paul	4	Gem. 29	○ Full Moone the xxix. day, 24. minut. after twelue a clocke in the morning
26	e	Policarp. bish	5	Can. 13	
27	f	Quind. Hillar.	6	Can. 27	
44 28	g	4. sun. af. Epi.	7	Leo. 11	
29	a	Theod. priest	8	Leo. 24	
30	b	Batild. queen	9	Vir. 7	
31	c	Sath & Vict.	10	Vir. 21	

Februarie hath xxviii. dayes.

Hou. before noone.		12	11	10	9	8	7
parts of shadow for the	8. day	23	25	30	42	80	6
	18. day	20	21	25	54	61	226
	28. day	17	8	22	29	43	112
Hou. after noone			1	2	3	4	5

	1	d	Briget. Fast.	11	Libra. 3	
	2	e	Purif. of Mar	12	Libr. 16	☾ Last quarter, the v. day, 33. minut. after fixe of the clocke at night.
	3	f	Crast. Purific.	13	Libr. 28	
45	4	G	Septua. sund.	14	Scor 10	
	5	a	Agathe virg.	15	Sco. 22	
	6	b	Dorothy vir.	16	Sagit. 5	
	7	c	Angule bishop	17	Sag. 17	
	8	d	Paul bishop	18	Sag. 29	
	9	e	Octab. Purisi.	19	Capr. 11	● New Moone, the xiii. daye, at ii. of the clocke and 40. minutes in the afternoone
	10	f	Sol in Pisces.	20	Capr. 24	
46	11	G	Sexage. sund.	21	Aquar. 6	
	12	a	Terme ends.	22	Aqu. 19	
	13	b	Wolstrane.	23	Pisce. 2	
	14	c	Valentine.	24	Pise. 16	
	15	d	Faustin & Jo.	25	Pics. 29	
	16	e	Julian. virg.	26	Arie. 13	☽ First quarter, the xx. daye, 12. minu. before high noone.
	17	f	Constance.	27	Aries. 27	
47	18	G	quinquagesi.	28	Tau. 12	
	19	a	Princ. H. borne	M	Tau. 26	
	20	b	Shroue tuesd.	2	Gemi. 11	
	21	c	Ashwednesday	3	Gem. 25	
	22	d	S. Pet. chaire	4	Canc. 9	
	23	e	Fast.	5	Can. 23	○ Full Moone the xxvii. day, 20. minutes after noone.
	24	f	Mathias Ap.	6	Leo. 7	
48	25	G	Quadragesi.	7	Leo. 21	
	26	a	Nestor mart.	8	Virg. 4	
	27	b	August. bish.	9	Vir. 17	
	28	c	Ember weeke	10	Virg. 22	

The Iulian, Sosigenian or ancient Eng. kalender

new ka

signe the moo. is in

H. before noone		12	11	10	9	8	7	6	
Acts of Apostles for the	12.d.	15	16	19	24	37	74	sunset	
	22 d	13	14	16	21	30	54	2.1	
	31 d	11	12	14	18	26	43	2.12	
H. after noone			1	2	3	4	5	6	

1	d	David bishop	11	Libr.12		
2	e	Chadde bish.	12	Libr.23		
3	f	Templ. finish.	13	Scor. 6		
49 4	G	2 sun. in Lent,	14	Scor.18	☾	Last quarter, the vii. daye, 38. minut. after two of the clocke after noone.
5	a	22 reminiscere	15	Sagit.0		
6	b	Vict.& Victor	16	Sag.12		
7	c	Perpet.& felic	17	Sag.24		
8	d	Dep. of Felix	18	Capr.7		
9	e	30. Martyrs.	19	Capr.19		
10	f	[illegible]	20	Aqua. 2		
50 11	G	3 sun in Lent	21	Aqua.13	●	New Moone, the xv. daye, halfe an houre after two of the clock in the morning.
12	a	or Deut.	22	Aqu. 28		
13	b	Equall day	23	Pisc. 11		
14	c	and nigh.	24	Pisc. 25		
15	d	Longine mar.	25	Aries. 9		
16	e	Lazarus rais.	26	Arie. 21		
17	f	Gertrud vir.	27	Taur. 7		
51 18	G	4.sun. in Lent	28	Tau. 22	☽	First quarter the xxi. daye, 32 minutes after five of the clock in the euening.
19	a	Joseph mart.	29	Gemi. 7		
20	b	Chri.ent.Jor.	30	Gem.21		
21	c	Benedictus.	31	Canc. 6		
22	d	Mary Mand.	Ap	Can. 20		
23	e	annoint Chri.	2	Leo. 4		
24	f	Ia.reg.Iac.F.	3	Leo. 17		
52 25	G	Annun.of Ma	4	Virg. 1	○	Full Moone, the xxix. day, 25. minuts after v. of the clock in the morning.
26	a	Chri. in sepul.	5	Virg.13		
27	b	Resurrection.	6	Virg.26		
28	c	Dorothy vir.	7	Libr. 8		
29	d	Victorine.	8	Libr. 20		
30	e	Quirine.	9	Scorp.2		
31	f	Anselme.	10	Scor.14		

Aprill hath xxx. dayes.

H. before noone.		12	11	10	9	8	7	6	5
parts of shadow for the	10. d.	10	11	13	16	23	36	76	infinit.
	21. d.	9	9	11	15	21	31	58	267
	31. d.	8	8	10	14	19	28	49	139
H. after noone.			1	2	3	4	5	6	7

1	1	G	Palme sund.	11	Scor. 26	
	2	a	Mary Egipt.	12	Sagit. 8	
	3	b	Rich. bishop.	13	Sag. 20	☾ Last quarter,
	4	c	Ambrose bish.	14	Capri. 2	the vi. day, at
The	5	d	Martia mar.	15	Cap. 14	viii. of the clock
	6	e	Sextus bish.	16	Cap. 27	and 42. minutes
	7	f	Ephem. virg.	17	Aqu. 9	before noone.
	8	G	Easter day.	18	Aqu. 22	
2	9	a	Perpetuus.	19	Pisce. 6	
	10	b	Israelites pas-	20	Pisc. 19	
	11	c	sed Jordan.	21	Aries. 3	● New Moone
number	12	d	Solon Taurus	22	Arie. 17	the xiii. day, at
	13	e	Ahashueresh	23	Taur. 2	high noone.
	14	f	kild ẏ Jewes.	24	Tau. 16	
3	15	G	Lowe sunday	25	Gemi. 1	
	16	a	or quasim.	26	Gem. 16	
	17	b	Anicete bish.	27	Canc. 10	☽ First quarter,
	18	c	Isr. past r. sea	28	Can. 15	the xx. day, at
Hebdoma.	19	d	Alpheg bishop	29	Leo. 0	two of the clocke
	20	e	Victor marc.	30	Leo. 23	and 27. minut. in
	21	f	Ancelme bish.	31	Leo. 27	the morning.
4	22	G	Miseric Dom.	2	Vir. 10	
	23	a	Quin paschæ	3	Vir. 13	
	24	b	Melitus.	4	Libra. 3	
dall.	25	c	Mark. Euā.	5	Libr. 16	Full Moone
	26	d	Term beg. 25	6	Libr. 30	the xxvii. day
	27	e	Anastasi. bish.	7	Scor. 12	before ix. of the
	28	f	Vitalis bish.	8	Sco. 23	clock at nighe.
5	29	G	Iubilate.	9	Sagit. 3	
	30	a	Tres paschæ.	10	Sag. 27	

H. before noone.	12	11	10	9	8	7	6	5	4
parts of shadow for the	12. D	7	8	10	13	17	26	43	100	infin.
	22. D	7	7	9	12	17	24	39	82	2580
	31. D	6	7	9	12	16	23	37	74	365

H. after noone.		1	2	3	4	5	6	7	8

1	b	Phil. & Jacob	11	Sag. 28		
2	c	Athan. bishop	12	Capr. 10		
3	d	Inuen. of cro.	13	Capr. 22	☾	Last quarter, the v. day, 20.
4	e	Frauncis.	14	Aquar. 5		min. before mid-
5	f	Goddard.	15	Aqua. 17		night.
6	6	Cantate.	16	Pisce. 0		
7	a	Mense paschæ	17	Pisc. 14		
8	b	Appa. s. Mich.	18	Pisc. 27		
9	c	Tran. of Nic.	19	Aries. 11		
10	d	Noah victua-	20	Arie. 25	●	New Moone
11	e	led the Arke.	21	Taur. 10		the xii. daye,
12	f	Solm Gemin.	22	Tau. 25		52. minut. after
7	13	Rogat. sunday	23	Gem. 10		vii. of the clocke
14	a	Quind paschæ	24	Gem. 25		in the euening.
15	b	Jewes whitſ.	25	Can. 9		
16	c	Wanna raind	26	Canc. 23		
17	d	Ascension day	27	Leo. 7		
18	e	Craſt. Ascen.	28	Leo. 18		
19	f	Dunstan.	29	Virg. 7	☽	First quarter, the xix. daye, a
8	20	Exaudi.	30	Virg. 20		quart. after high
21	a	Geme ends.	31	Libra. 3		noone.
22	h	Jer. burnt	Ju	Libra. 15		
23	c	with fire.	2	Libra. 27		
24	d	Tran. of Frã.	3	Scor. 9		
25	e	Urbane.	4	Scor. 21	○	Full Moone,
26	f	Augustine.	5	Sagit. 3		the xxviii. day,
9	27	Pentecoste	6	Sagi. 14		39. minut. after
28	a	German bish.	7	Sag. 26		high noone.
29	b	Felix bishop.	8	Capr. 8		
30	c	Emb wake.	9	Cap. 19		
31	d	Petronil vir.	10	Aquar. 1		

Iune hath xxx. dayes.

H. before noone.		12	11	10	9	8	7	6	5	4
parts of shadow for the	1. day	6	7	9	12	16	23	37	74	565
	12. d.	6	7	9	12	16	23	36	72	453
	23. d.	6	7	9	14	16	23	37	74	565
Ho. after noone.			1	2	3	4	5	6	7	8

	1	e	Nichomede.	11	Aqua. 14	
10	2	f	Marcellus.	12	Aqua. 26	☾ Last quarter,
	3	☉	Trinity sund.	13	Pisces. 9	the iiii. daye,
	4	a	Cras. trinitatis	14	Pisc. 22	three quarters
	5	b	Bonifacius.	15	Aries. 6	before high
	6	c	Dianas tẽp bu.	16	Arie. 24	noone.
	7	d	Corpus Chri.	17	Taur. 4	
	8	e	Terme begin	18	Tau. 19	
11	9	f	William con.	19	Gem. 4	
	10	☉	1. sun. a't trin.	20	Gem. 19	● New Moone
	11	a	Octab. trinita.	21	Cance. 4	the xi. day, at
	12	b	Longest day	22	Can. 19	iii. of the clocke
	13	c	Anth. confess.	23	Leo. 6	and 7. minutes in
	14	d	Trans of Ric.	24	Leo. 18	the morning.
	15	e	Vite.	25	Virgo. 1	
	16	f	Marceline.	26	Virg. 15	
12	17	☉	2 post trinit.	27	Vir. 28	
	18	a	quind trinita.	28	Libr. 11	☽ First quarter,
	19	b	Samuel Bish.	29	Libr. 24	the xvii. daye,
	20	c	Trans. Edw.	30	Scor. 6	20. minu. before
	21	d	Walbur. vir.	Ia	Sco. 18	one of the clocke
	22	e	Alban mart.	2	Sco. 30	in the morning.
	23	f	Ethedre Fast	3	Sag. 12	
13	24	☉	John Baptist	4	Sag. 23	
	25	a	Tres trinitatis	5	Capri. 3	
	26	b	John & Paul.	6	Capr. 17	○ Full Moone,
	27	c	Terme ends.	7	Capr. 29	the xxvi. daye,
	28	d	Fast.	8	Aqu. 11	at three of the
	29	e	Peter & Paul	9	Aqu. 22	clock 51. minut.
	30	f	Com. of Paul	10	Pisce. 5	in the morning.

℞ before nwne.	12	11	10	9	8	7	6	5	4	
parts of shadow for the	3 da	7	7	9	12	16	24	39	82	2580
	14. d	7	8	10	13	17	26	43	100	infin.
	24.	8	8	10	14	19	28	49	139	
℞. after nwne.		1	2	3	4	5	6	7	8	

		☉	4. post trinitat.	11	Pisce. 18
14	1	a	Visit. of Mar.	12	Aries. 2
	2	b	Tran. of Tho.	13	Arie. 15
	3	c	Trãsl. of Mar	14	Arie. 29
	4	d	Joe virgin.	15	Tau. 13
	5	e	Oct. of Peter	16	Tau. 28
	6	f	Martialisma.	17	Gem. 13
	7	☉	5 post trinitat.	18	Gem. 28
	8		Jerusl. besieged	19	Canc. 13
15	9	a	by ỳ k. of Bab.	20	Canc. 27
	10	b	7. brethr. mar.	21	Leo. 12
	11	c	In Cæl. bone	22	Leo. 26
	12	d	Pentiatt.	23	Virg. 10
	13	e	Solis in Leo.	24	Virg. 23
	14	f			
	15	☉	6. post trinitat.	25	Libra. 6
16	16	a	Transf. Osm.	26	Libr. 19
	17	b	Mos burnt ỳ 2	27	Scor. 2
	18	c	tables of stone	28	Scor. 14
	19	d	Nat. Reg. Isc.	29	Sco. 26
	20	e	Dog dates br.	30	Sagi. 8
	21	f	Praxedis vir.	31	Sag. 20
	22	☉	7. post trinitat.	Aug	Capri. 2
17	23	a	22 Mar. Mag	2	Cap. 14
	24	b	Christi. Fast.	3	Cap. 26
	25	c	James Apost.	4	Aqua. 8
	26	d	S. Anne.	5	Aqua. 20
	27	e	All. Saepers.	6	Pisce. 3
	28	f	Sampf. bish.	7	Pisc. 15
18	29	☉	8. post trinit.	8	Pisc. 28
	30	a	Abdõ & Sem.	9	Arie. 12
	31	b	German bish.	10	Arie. 25

☾ Last quarter, the iii. daye, 19. minuts after viii. of the clocke at night.

New Mone, the tenth day, halfe an houre after ten a clock before nwne.

☽ First quarter, the xvii. daye, at 21. min. after iii. of the clocke afternoone.

● Full Mone the xxv. daye, at vi. of the clock in the euening.

H. before nowne	12	11	10	9	8	7	6	5	
parts of shadow for the	3.d. 9	9	11	15	21	31	58	207	
	14.d 10	11	13	16	23	36	72	sū set	
	24.d 11	12	14	18	20	43	111	sū set	

H. after nowne.			1	2	3	4	5	6	7
1	c	Lammas day.	11	Taur. 9					
2	d	Steph. bishop	12	Taur. 24	☾	Last quarter,			
3	e	Inuē. of Step.	13	Gemin. 8		the ii. daye, at			
4	f	Justin priest.	14	Gem. 23		two of the clocke			
5	☉	Sixtus conf.	15	Cance. 7		and 47. minutes			
19 6	a	Transf. Christ	16	Canc. 22		in the morning.			
7	b	Jerusa. fired	17	Leo. 6					
8	c	Ciriacke.	18	Leo. 20	●	New Mone			
9	d	Romain mart.	19	Virg. 4		the viii daye,			
10	e	Lawrēce mart.	20	Virg. 18		a quarter past			
11	f	Tiburt mart.	21	Libra. 1		vii. of the clocke			
12	☉	10. post. trinit.	22	Libr. 14		at night.			
20 13	a	Hippolite.	23	Libr. 27					
14	b	Vigil.	24	Scor. 9	☽	First quarter			
15	c	Assū. of our la.	25	Scor. 22		the xvi. daye,			
16	d	Roch. marter.	26	Sagit. 4		a quarter past			
17	e	Oct. of Lawrē.	27	Sagi. 16		viii. of the clock			
18	f	Agapite mart.	28	Sagi. 28		in the morning.			
21 19	☉	11. post. trinit.	29	Capr. 20					
20	a	Lodowick.	30	Capri. 22	○	Full Mone			
21	b	Barnard conf.	31	Aqua. 5		the xviiii. day			
22	c	Octa. Assump.	S.	Aqua. 17		at seaven of the			
23	d	Timoth.	2	Aqua. 29		clock and 7. mi.			
24	e	Bartholom.	3	Pisce. 12		in the morning.			
25	f	Lewis king.	4	Pisce. 25					
22 26	☉	12. post trinit.	5	Aries. 8	☽	Last quarter,			
27	a	Rufi. mart.	6	Aries. 22		the xxvi. daye,			
28	b	Decollation.	7	Taur. 6		at eight of the			
29	c	John beheaded	8	Taur. 20		clock in the mor-			
30	d	Felic. & Iren.	9	Gemin. 4		ning.			
31	e	Raimund.	10	Gemi. 19					

September hath xxx. dayes.

H. before noone.	12	11	10	9	8	7	6
parts of shadow for the 3. day	13	14	16	21	30	54	222
14. day	15	16	19	24	37	73	sun set.
24. day	17	18	22	29	45	112	infinite.
H. after noone.		1	2	3	4	5	6

	1	f	Gyles abbot.	11	Canc. 3	
23	2	G	13. post trini.	12	Can. 17	● New Moone the vii. day, at fiue of the clocke and 50. minut. in the morning.
	3	a	Gregorie.	13	Leo. 2	
	4	b	Trãs. of Cut.	14	Leo. 16	
	5	c	Bertine.	15	Leo. 29	
	6	d	Eugenius.	16	Vir. 13	
	7	e	Nati. of Eliz.	17	Vir. 27	
	8	f	Nati. of Mary	18	Libr. 9	
24	9	G	14. post trinit.	19	Libr. 22	
	10	a	Lawrence.	20	Scor. 5	First quarter, the xv. day, at ii. of the clocke & 42. minut. in the morning.
	11	b	Proth. & Jaci.	21	Sco. 17	
	12	c	Martinian.	22	Sco. 29	
	13	d	Eq. da. & nigh	23	Sag. 11	
	14	e	Holy Crosse.	24	Sag. 23	
	15	f	Nichomede.	25	Capri. 6	
25	16	G	15. post trinit.	26	Cap. 18	
	17	a	Lambert bish.	27	Aqua. 0	
	18	b	Vict. & Corõ.	28	Aqua. 13	Full Moone the xxii. day, at vii. of the clock and 8. minut. after noone.
	19	c	Ember wake	29	Aqu. 25	
	20	d	Januar. Fast	30	Pisc. 18	
	21	e	Mathew apo.	D.	Pisc. 21	
	22	f	Mauritius	2	Aries. 4	
26	23	G	16. post trini.	3	Arie. 18	
	24	a	Andocheus.	4	Taur. 2	
	25	b	Jer wals eud.	5	Tau. 16	
	26	c	Cipri. & Just.	6	Gemin. 0	☾ Last quarter, the xxix. daye, halfe an houre after one after noone.
	27	d	Cosm. & Dam.	7	Gem. 15	
	28	e	Exuper. Fast.	8	Gem. 30	
27	29	f	Michael arch	9	Can. 14	
	30	G	17. post trinit.	10	Can. 28	

H. before noone.		12	11	10	9	8	7	
parts of shado for the	4. day	20	21	25	34	61	206	
	14. da	23	25	30	42	79	1896	
	24. da	27	29	35	59	Sunne set.		

H. after noone			1	2	3	4	5	
1	a	Feast of trip.	11	Leo. 13				
2	b	Leuit. 23. 24	12	Leo. 26				● New Moone the vi. daye, 20. minutes after vii. of the clocke at night.
3	c	Candlis. mart.	13	Virg. 10				
4	d	Jewes fast &	14	Virg. 23				
5	e	morne for Ge.	15	Libra. 6				
6	f	Octa. Michae.	16	Libr. 19				
28 7	☾	18. post trinit.	17	Scor. 1				
8	a	Pelagius vir.	18	Scor. 13				
9	b	Terme begin.	19	Sco. 25				☽ First quarter the xiiii. day, at ix. of the clock and 42. minutes in the night.
10	c	Feast of recō.	20	Sagi. 7				
11	d	Michaelis. vir.	21	Sag. 19				
12	e	☉ in Scorpio.	22	Capri. 1				
13	f	quind Mich.	23	Capr. 13				
29 14	☉	19. post trinit.	24	Capr. 25				
15	a	Jewes feast of	25	Aquar. 8				
16	b	the tabernacle	26	Aqu. 20				
17	c	Arke on Arar.	27	Pisce. 3				○ Full Moone, the xvii. daye, at vi. of the clock and 21. minut. in the morning.
18	d	Luke Euang.	28	Pisc. 16				
19	e	Frideswick.	29	Pisc. 29				
20	f	Tres Michael.	30	Arie. 13				
30 21	☾	20 post trinit.	31	Arie. 27				
22	a	Holy conuoca=	No	Tau. 11				
23	b	tion feast.	2	Tau. 25				
24	c	Maglory.	3	Gem. 10				
25	d	Trās. of John	4	Gem. 25				☾ Last quarter, the xxviii. daye at ix of the clock 19. minut. in the night.
26	e	Ursula.	5	Can. 10				
27	f	Mens. Vic. Fa	6	Can. 24				
31 28	☾	Simō & Jude.	7	Leo. 9				
29	a	Narcissus.	8	Leo 27				
30	b	Luthers pro=	9	Virg. 7				
31	c	positiōs. 1517	10	Vir. 20				

Nouember hath xxx. daves.

H before noone.	12	11	10	9	8
parts of shadow for the 2. day	32	34	42	65	209
13. da	36	39	49	83	550
22. da	40	45	57	104	sun set
Ho. after noone.		1	2	3	4

	1	d	All Saints.	11	Libr. 3	
	2	e	All soules.	12	Libr. 16	
	3	f	Crast anima.	13	Libra. 28	● New Moone
32	4	G	22. post trinit.	14	Scor. 10	the v. day, 20.
	5	a	Cons. at Par.	15	Scor. 22	minu. before high
	6	b	Leonard.	16	Sagi. 4	noone.
	7	c	Wilfrid arch.	17	Sagit. 16	
	8	d	4. Martirs.	18	Sagi. 27	
	9	e	Cyprian abb.	19	Capri. 9	☽ First quarter,
	10	f	Martin.	20	Capr. 21	the xiii. daye,
33	11	G	23. post trinit.	21	Aquar. 3	at iiii. of the clock
	12	a	Crast Marti.	22	Aqua. 16	and 12. minut. at
	13	b	Sol in Sagit.	23	Aqua. 28	night.
	14	c	Trãs. of Erk.	24	Pisce. 10	
	15	d	Jerob. 2. goldẽ	25	Pisce. 29	
	16	e	Calues set vp.	26	Aries. 7	○ Full Moone,
	17	f	S. Hugh.	27	Arie. 21	the xx. day, at
34	18	G	24. post triniti.	28	Taur. 5	iiii. of the clocke
	19	a	Octab. marti.	29	Taur. 20	and 49. minut. at
	20	b	Edmo. King.	30	Gemin. 4	night.
	21	c	Pres. of Mary	De	Gem. 19	
	22	d	Cycely virgi.	2	Canc. 4	
	23	e	Clement bish.	3	Canc. 19	
	24	f	Grisog. mart.	4	Leo. 4	☾ Last quarter,
35	25	G	25. post trinit.	5	Leo. 18	the xxvii. day,
	26	a	quind. marti.	6	Virg. 2	at 8. of the clocke
	27	b	Agricola.	7	Virgo. 16	and 10. minutes
	28	c	Terme ends.	8	Virg. 30	before noone.
	29	d	Fast.	9	Libra. 13	
	30	e	Andrew apost.	10	Libra. 25	

December hath xxxi. dayes.

Houres before noue.		12	11	10	9
Parts of shadow for the.	3. day.	43	47	92	122
	13. day	45	49	65	131
	23. day	43	47	62	122
	31. day	40	45	47	104

	1	f	Marr. goe. out	11	Scorp. 8	
36	2	G	Aduent. sunda	12	Sco. 20	● New Moone,
	3	a	Libanus mar.	13	Sagit. 2	the v. day, at
	4	b	Barbary vir.	14	Sag. 13	sixe of the clocke
	5	c	Sabbe abbot.	15	Sag. 25	and 21. mi. in the
	6	d	Nichola. bish.	16	Capri. 7	morning.
	7	e	Oct. of Andr.	17	Cap. 18	
	8	f	Conc. of Ma.	18	Capr. 30	
37	9	G	2. sun. in Adu.	19	Aqua. 12	First quarter
	10	a	Eulalia virg.	20	Aqu. 24	the xiii. day, at
	11	b	Damasius.	21	Pisce. 6	ix. of the clock in
	12	c	Shortest day.	22	Pisc. 19	the morning.
	13	d	Lucie virgin.	23	Aries. 2	
	14	e	Othely virgi.	24	Arie. 15	
	15	f	Ualeriu. bish.	25	Arie. 29	
38	16	G	3. sun. in. Adue.	26	Tau. 13	● Full Moone,
	17	a	Lazarus bish.	27	Tau. 28	the xx. day at
	18	b	Gracian.	28	Gem. 13	three of the clock
	19	c	Ember week	29	Gem. 28	and 5. minut. in
	20	d	Julian. Fast	30	Can. 13	the morning, be-
	21	e	Thomas apo.	31	Can. 28	ing Eclipsed.
	22	f	xxx. Martyrs.	1	Leo. 13	
39	23	G	4. sun. in Adu.	2	Leo. 27	
	24	a	Ad. & Eue. Fa	3	Uir. 11	
	25	b	Christmas do	4	Uirg. 25	☾ Last quarter,
	26	c	S. Steph. day	5	Libra. 8	the xxvi. day,
	27	d	John Euang.	6	Libr. 21	half an houre
	28	e	Innocent. day	7	Scor. 4	after ten of the
	29	f	Thom. Becket	8	Sco. 17	clock at night.
40	30	G	Transl. James	9	Scor. 29	
	31	a	Siluester bish	10	Sag. 11	

No Preſident, but a plaine Prognoſtication, for this preſent yeare. 1610

Being ſecond after Leape yeare.

Inſtructing the Reader in many newe and freſh varieties, ſuch that the like hath neuer heeretofore been publiſhed in his volume: with briefe preiudication of this Reuolution.

The whole moſte eſpecially referred to the Longitude and Latitude of the worthy Towne of *Shrewſebury*, other ſome general, fitting any place or wel diſpoſed perſon.

By *Arthur Hopton* Gent.

Aſtra regunt Homines, & regit Aſtra Deus.

Commend; or Come mend.

Printed for the Company of Stacioners.

To the kinde and friendly Readers, *fauourers of Vrania.*

Kinde Reader, if I write homely, thinke I meane honestly. all good is wished to the equall and indifferent, with free libertie to correct or accept, onely like tender buddes we must not bee nipped with the frost of presumption, or like ignorant transgressors, feared with the explication of errours: for it is too childishto draw the sound of emptie barrels, since wee well know if a full one bee also strucke, there is made a musicall Diapazon, euerie thing is better descerned by his opposite: therefore the malidictions of the enuious are trumpets to sound the praise of the meritorious, I cannot Gnathonise, and therfore craue nothing, onely if anie thing like you, vse it, if not, leaue it: for it is a shame to become a begger in print in these daies. The creditor is not beholding to his debtor for receiuing his money, as for thoseof sufficient worth, they way not his wealth, yet if such speake well, we be treble beholden, as for those idle disgenerous tongues that seeke to coarguate and denorme, what my painfull endeauors had composd [as careleſſe of their barbarous conspernation] I leaue them with the Syrian wolues to barke against the moone. Touching the worke I promised 1608, it is now come into the Prin-

ers hands, and are to be ſold at the ſigne of the Crowne in Paules Church yard, performed in better method then it was firſt meant, then let the backbiters like toades ſwell with enuy till they burſt, onely doe you ſpeake well till you haue other cauſe, ſo ſhall this promiſed labour and myſelfe, both now and euer reſt at your diſpoſe.

Arthur Hopton.

	Epact.	
	vve.	day.
Will: Conquerour,	29	0
William Rufus,	24	0
Henry 1,	18	3
Stephan,	36	0
Henry 2,	30	4
Richard I,	14	5
Iohn,	1	5
Henry 3,	29	5
Edward I,	30	5
Edward 2,	14	6
Edward 3,	43	4
Richard 2,	43	0

	Epact.	
	vve.	day.
Henry 4,	26	6
Henry 5,	51	2
Henry 6,	22	5
Edward 4,	49	0
Edward 5,	2	1
Richard 3,	11	2
Henry 7,	21	3
Henry 8,	4	0
Edward 6	44	0
Marie,	14	5
Elizabeth,	33	6
K. Iames.	51	6

IF the Epact be the greater, the demaund was made in the end of Regnall yeare, which standeth periodically against the Ecclesian yeare. But if the Hebdomadall number bee the greater, it was made in the beginning of the Regnall yeare, & in the yeare of our Lord next before.

Example.

An Euidence was dated the 6. of Iulie, in the 40. yeare of Elizabeth, whose Epact is 33. weekes 6. daies, the Hebdomadall number of the 6. of July is 14. weekes 3. daies, heere the Epact is the greater: therefore the date was in the end of the Regnall yeere, and stands against 1598, and it is 11, yeeres since, but if the Hebdomadall number had beene greater, it had beene in the beginning of the Regnall yeere in the yeere 1597, and it had beene 13. yeeres since at the time to come 1598.

And heere note that at the beginning of euery Kings raigne, there is set one of these words Periodicall, which signifies, that the said King raigned fully so many yeeres, as be there set downe, beside odde moneths, weekes, &c. as is sette downe in the Table for, or Defective, which shewes that he did but write of the last yeere that is set downe.

A Prognostication.

Of the Eclypses this present yeere 1610.

*Foure times this present yeere shall the two great luminaries suffer darkenes, whereof the de-*priuation of light is twise in the moone, & the obscuration as often in the Sunne.

1 CONcerning the first, it is an obscuration of the Sun, therefore he shall be eclypsed the 11. day of June: but in the reformed yeere the 21. day of June, halfe a quarter after three in the morning, offering it selfe onely to such that dwell further into the east, and this will be a fearefull Eclipse vnto them, for the whole bodie of the Sunne will be darkened, because the Sunne and Moone by them are seene in a true visible coniunction, the duration hereof will bee three houres.

But some haue doubted if possible there could be a totall Eclipse of the Sunne, for were it so, they say the day of Iudgement were comming, but that is not so, for the Eclipse may be totall in respect of the position of the place, but to all nations that see it, it cannot be totall: for it was obserued at the Grecian warre, that the Sunne was all darkened, so that Thucid saies, that the starres appeared in heauen, also Ammianus Marcellinus lib. 20, affirmes that before the death of Constantius, the Sunne was all darkened that the starres likewise appeared, so doth Mathias Mechouiensis reporte that 1415, the sunne beeing all darkened, the starres appeared as it had beene night, and that the birds by occasion of the suddaine darknesse fell vpon the earth.

2 Againe in the said moneth of June, vpon the 26. day of our yeere, but the 6. of July in the Roman yeere, there shall be a depriuation of light in the body of the moone neere to the Dragons taile, about three quarters after three in the morning, the parts darkened be 10, 35, 16, which is her whole body within one fingers breadth and something better, the duration from the brginning to the end is three howres and a halfe.

Now for that the beginning of this Eclipse with vs, is before the apparitiō of the Sunne, we in England, France, Spaine, Scot-

Scotland, Ireland &c. shall see the same, as for the middest and ending. wee shall not behold it, but it must be referred to other more westerne.

3 An other great Eclipse doth offer it selfe in the Sunne vnto the Easterne people. as Asia, Minor, Syria, Rodes, Cyprus &c. but wee shall see no part thereof, for which cause I will be breefe, it happens the 5. of December at 6. of the clocke after sunne set, the quantity of the obscuration is 9. points, or three parts of ½ his body, the whole duration is three howres.

4 The fourth and last Eclipse shall be in the Moone, for vpon the 11. day of December, she being 44. deg. 26. sec. into the north from the ecliptieke at one of the clocke 57. de. and 7. se. will begin to enter into the shadowe of the earth, at which time the Sunne is in the 7. grad, 52. deg. 10. sec. of Capricorne, and the moone opposite to him in the 7. degree, 52. deg. 10. se. of Cancer not far from the Dragons head, the coequation of the anomaly of the Sun. being 5. signes, 20. part, 6. de. 47. se. and of the moone 6. signes 2. part, 29. de. 51. se. Scrupula incidentiæ is 45. degree 35. sec. which being parted by the howrelie motion of the Moon. 35. deg. and 6. sec. you haue Tempus incidentiæ, 1. hour 13. minutes, or the time when the Eclipse shall be in fullest obscuration, viz. at three of the clock, 9 de. & 7. se. in the morning, & so at 4 of the clocke 27. de. & 7. se. hauing gotten 52. de. 49. se. of north lattitude, she will be out the shadowe of the earth againe, all the whole time ascending from her περιγειον called of Plinie ima abſis towards the most highest & remotest place from the earth, called of the Greekes απογειον by the Arabians Aux. and of Plinie Abſis ſumma.

The parts of her bodie that will bee darkened is, the one halfe and somewhat better, and the whole duration from the beginning is 2. howres. 36. minutes, so that for vulgar capacity, the Eclipse stands briefly thus.

the moones Eclipse.	beginning middest, ending	before noone at	h: d. se. 1. 57. 7. 3. 9. 7 4. 27. 7	the 11. of December.	

A Prognostication

Of the effects of the coniunctions &c. of the ſuperiour Planets.

ALbumaſar ſaith, that the preſence of warres is ſeene by the domination of Mars, or by the coniunction of Saturne and Mars, eſpecially if Mars be ſeated in a humane Alterine, for then the receiued opinion affirmeth there will inſue murthers, rapes, ſlaughters, interfections and vaſtations by fire and ſword. If then this ſo be, what may wee expect from the ſaid coniunction of Saturne and Mars, vpon the 23. day of Aprill this preſent yeere, a quarter paſt 4. in the morning, in the ſigne of Aquarius, but onely the like euents recited.

Further it doth ſignifie particular erundations and earthquakes to the regions of Amazonia, Sarmatia, Tartaria, the great Vvallachia, Ruſſia, Dania, the Meridionall part of Suecia and other remote countries. Bonatus ſaith, that the meeting of any of the ſuperiour planets in any of the ſignes of the watery trygon Inuſitatas inundationes portendit, and ſo is it like to bring vnto vs great aboundance of raine, thunder and haile, which will be the more cold by the regiment of Saturne, many other aſperts that be moſt forcible for the alteration of the aire happen this yeare, but verily our coniectures in England touching the diſpoſition of the weather be not ſo probable as others that inhabite in a larger continent, as Spaine, France, Italie &c. Becauſe we be ſo inuironed & ſhut vp with the ſeas round about, that they be ready vpon diuerſe occaſions (as by the vertue of the ſunne or violence of the windes) to yeelde aboundance of water to diſtemper the aire, whereby the heauens with vs be more inconſtant, the Scriptures ſay that the ſouth windes bring heate, and ſo in other countries they doe, but with vs they bring wet, for that they come ouer the ſeas and other marſh places, and ſo gather vp moiſture: for all windes be not alike in all places, ſo did the Eaſterlian windes in Spaine and Aſia, from the eaſt in Pontus from the north, in other places from the ſouth. Ptolome and Carda maintaine the ſouth. Plinie the northeaſt.

Of the ſtate of this Reuolution in generall.

TO ſpeake in generall of the condition of this Reuolution, many things offer themſelues to be remembred, firſt touching the beeing of the Sun in the 12. houſe, I will ſay nothing, becauſe the myſterie cannot bee vttered without perrill, for it is not good to heawe aboue ones head, leaſt the chippes fall in his owne eies, then to proceede, wee haue foreſhewen vnto vs a ſerled and effectuall faith of Chriſtians amongſt Pagamists, and heathens, proſperous euent foretold to their Ambaſſenders, but if wee may preſume of Iudiciall Aſtrology, the miſfortune of many learned men is to be lamented, for they be threatned with diuerſe aduerſities, as backbiters, priuie enemies, impriſonment, alisque turbationes & difficultates prodie, for ſo much doth the configuration of Mercurie witneſſe euen to our owne country men, but for the vulgar and common people, the moone, their Dominatrix, pretendsmuch good, eſpecially to the elder ſorte, we haue alſo many croſſes and aduerſities like to happen to louers, occaſioned by women eſpecially, whoſe vnconſtancie is to be too frequent, turning to the damage of ſome great men, and others authoriſed and learned of all ſorts, and it ſeemes there is no hurt to be feared thorough the diſtruſt of ſeruants on either ſide, and euen vnder the ſame ſtate and condition that the learned ſtand. ſo is it like to fare with women: for much death and many troubles is like to befall them, concerning warres, Mars euelly affected may ſtirre much amongſt great men, the diſſentions and differences betwixt whom will turne to great damage: but frō this generallity we muſt except all Saturnists, Melancholists, and ſuch, ouer whom Saturne hath dominion.

Touching the aire, it is like not to bee ouer hotte, much cold, hoare froſts and ſnowe, as I haue obſerued from the Doctrine of Hal, cap. 26. lib. 8. de Iudicijs Aſtror, in February about the firſt 6. 12. 15. 21. dayes, many fierce windes and tempeſts of ſnow or raine. in Januarie 9, 12. 24. 28, of the ſame nature. March 8, 15, 25, 29, as the former, in Aprill 22, 26, &c, windes, raine, if not thunder. May, 1, 4, 6, 15. 19, 25, 27, 31. diſtempered weather of windes, haile, and raine, and ſo note the inſuing daies of euery moneth to be very tempeſtu-

ous

ons and much distempered, according to the nature of the moneth.

June, 2. 3. 4. 14. 23. July, 9. 11. 14. 16. 24. August 3. 20. 31. September 13. 24. 25. 27. October, 5. 6. 11. 16. 21. 31. November 14. 15. 19. 24. December, 5. 15. 29. 31.

The prescience of the plague setting aside the deuine will of God, is taken from histories and experience according to the Clymactericall yeare, and by this doctrine London (which the Lord in mercie preserue) stands in danger of infection, but Shrewsburie should stand safe more yeares to come at the pleasure of God, whose commandements if thou obserue, the Psalmes say, the plague or pestilence shall not come within thy house &c.

By this method and teaching, wee may pronounce plenty of corne, and the price to fall in respect of the yeare before.

And from the Doctrine of Peucer in his bookes De Diuinatione, we may obserue an increasing of the plague in some places by which particular watermen be threatned, and such that deale about waters, other diseases be like to raigne, whereof some by their rarenesse as yet want names, Ambassendors are like to haue a prosperous voiages, specially vpon waters.

But to leaue off these art-like prelages, let vs returne to vulgar capacitie, which euery husbandman can confirme by daily experience, vnlesse some few that liue by the side of some ranke riuer, so shall we see from age to age how that the earth doth wax more barren, as if it were dryed vp with age: for in some things halfe the encrease is fallen away, in others a third part for that aker which yeelded 6. 7. or 8. thrane of corne, now yeelds but 3. 3. and a halfe or 4. nay commonly it is lesse, for where 6. thrane was, there is not aboue two thrane, and as the strawes which are as the bodies of the tree that yeelds the fruit be diminished, so is also the corne which is the fruit it selfe decreased, euen from that it was vnder 100 yeeres before, for that thrane which yeelded 3. bushell and an halfe, now scarcely yeelds aboue two bushell, neither is this onely obserued in the fields, that be daily rent and tourned vp: but also in the very medowes, which would be iudged in humane capacitie had no cause, for they in most places be fallen away vnto one fourth part, so that that medowe which yeelded 20. loads of hay, now hath scarcely 15.

From the ground we may proceede vnto the trees that grow

thereon,

thereon, and there note the ſcarcitie that is produced by theſe barrennesſe, for where poore husbandmen were wont euery yeare, or euery ſecond yeere, to haue their trees laden with fruit, now it is well if they generally hit in ſeauen yeares, in like manner ackornes were vſed to abound, which freely and liberally euery yeare yeelded each poore man store of bacon (country prouiſion) and now the trees for the moſt part bee deuoured with the wastefull and needeleſſe deuiſe of vnprofitable iron milles, the reſt be barren and fruitleſſe, and ſcarcely hit in 7. yeares, as if they foreſaw their downefall and waxed barren through greefe, and if thoſe fewe that be yet remaining, doe chance to hit, they be ſo ingroſed by a few priuate men, that the poore people come by it at a high rate, hence it is that our ſcarcitie commeth, which God ſends for a iuſt plague for our ſinnes, or elſe he would haſteneth to an end. and ſo it would ſeeme by all ſignes that it doth, for man hath not onely decreaſed his ſtature, but alſo the number of his dates & yeares, ſo that if it hold on in proportion, in ſhort time it will come to nothing.

Whether the Eclypſes doe happen now more often then they did heretofore in the time of Ptolomie.

THe cauſes of the Eclipſes were handled in my Almanacke 1607, now therefore to this purpoſe, it is a common ſaying amongſt the vulgar, and alſo with ſome of good vnderſtanding, that the Eclypſes both ſolar and lunar, be now more frequent then they were in the time of Ptolomy Hipparchus Thales and others which liued before the Cataclisme, which makes me now take an occaſion for to remember the ſame.

Firſt, experience in the Opticks teach vs that this opinion is abſurd, for as there doth now remaine the ſame ſubſtance in the ſunne, moone and earth, as was before, ſo the quantity and quality of them is vnchanged, and wee may alſo note the ſame proportion of ſhadow now to remaine as was formerly ſet downe by the ancient Opticks, as Euclid &c. if wee will

ſpeake

speake Astronomically: if the Moones greatest latitude were lesser then it was in old time, then the way of the Moone must be nearer to the Ecliptick then it was, and the angles made by the mutuall section of those two Circles must bee more accute then they were: so that it must needs follow that the Eclipses both Lunæ & Solis should be more frequent, for that in the Coniunctions the Moone would bee more neere vnto the Sunne, and in oppositions to the shadowe of the Earth.

But if the Angles made by the Section of these two Circles, to wit: Viæ Lunæ & Solis were greater; then the Eclipses must needes be more rare and seldome then in times past: for the Moone being farre distant frō the way of the Sunne, as she can not aptly get betwixt vs and the Sun at the Coniunctions, the Sunne must needes be the rarer Eclipsed: and in like maner, she can not easilye get into the shadowe of the Earth at oppositions, whereby the Moone should be more seldome eclipsed then heretofore.

But no mutation being deprehended in these termes or angles, as from time to time it hath been diligently obserued, and that the greatest distance of the way of the Moone from the way of the Sunne, to be the same it was in old time: we must therefore conclude, that the Eclipses be not oftner or rarer in these our times, then they were in the times long past: For where no mutation is found in the cause, there the effects must necessarily respone to that it was before.

But against this (happely) some will obiect the altering of the declination of the Ecliptick, which now is. 24. mi. lesse then in the time of Ptolomeus.

But to this, I directly answere, that the Declination of the Ecliptick of it selfe, doth nothing vayle in the Eclipses: for though the Ecliptick be neerer or further of the Equator, that is not materiall, vnlesse the way of the Moone did also come neerer or departe further from the way of the Sunne, which it doth not at any time, so that I conclude against this obiection, as I did before, concerning the Eclipses.

But

But if any shal not be satisfied with these reasons, but will inferre a more frequency in the Eclipses, by occasion of the altred excentricity of the Sun, which many (though falsly) call the Corrugation of heauen: let them note this.

First, it is certaine that the Sunne in the Summer time, is furthest from the Earth, as being in the top of his Obsid, and the shadow of the Earth is more obtuse, his body appearing not onely of a lesser quantity, but also of a slower motion, being remooued now more neerer the Superficies of the Earth then he was in the time of Ptolomy, and thereby seeme bigger and swifter.

Upon the contrary parte, in the Winter time, the Sunne being in the lowest parte of his Obsid, and both approach neerest to the Earth appeereth not onely of a greater quantity, but also in a swifter motion, yet he is further from the Earth now then in the time of Hipparchus, &c. And it is euident by obseruations Astronomical, that his motion is slower and his Diameter seemeth lesse then heeretofore.

Therfore, because the Sunne being in his Apogeon, is now more neere to the earth then before, and being in his Perigeon is departed further off, it therfore appeereth that the

is changed, that is to say: Distantia centri Orbis Solis a terra, Centro vniuersi: But the Obe it selfe remaynes as it did, for if the Perigeon had come neerer to the Earth as well as the Apogeon, the Obe of the Sunne would haue been more contracted: But since the Excentricity onely altereth the quantity of the Obes of the Sunne being nothing varyed, it is euident, that the Eclipses are no more slowe or swyft now then in times long since past.

Of the Fyre or flying Dragon, seene in the County of Sallop Hereford &c. in May. 1609.

We will conclude our Astronomical discourses at this time by the seeing of a firy Dragon that was beheld the last yeare in our

Yorke

Horizon at night to the great admiration of the beholders, & surely not without the diuine prouidence of God, to forewarne vs of many eminent dãgers in these daugerous times, because they be prodromi, or things going before an ensuing mischeife, sent by God to moue vs to repentance, and though I doe certainly affirme it to come from God as a powerful remembrãce to declare his infinitnesse and moue vs to repentance, yet doe I not allow it as an immediate miracle, void of any naturall cause, since being well considered we shall finde it much differing from those miracles eternized in the holy Scriptures, and as I reiect the wicked epicurian opinions and senselesse imaginations, that would haue all things to come by chaunce without the determined purpose of the diuine prouidence, so I hate those that reducing any meteor or Apparition vnto a naturall cause, reiect and neglect God the principall cause of all things.

But to proceede this similitude of a Dragon appeared first like a starre, at what time the sunne began to be fired, and being settnat euere the earth increased in bignesse, and extended out in length by little and little, pyramoally, in so much that in the end the eleuated it to containe betwixt the two extremes 30. fecte, which so being, if any demand what it is, or how it is made, I answere them thus.

First we may well and sufficiently demonstrate it to bee a Meteor, which is defined to be a bodie imperfectly mixt, generated of the inconstant and infirme concretion of the Elements, and therefore not durable, I call it imperfectly mixt because it is soone changed into the proper element, of which it most consists.

It is made when a certaine quantity of vapours or fumes, indifferantly warme, be eleuated and drawne vp into the lowest aire, and there gathering ther vpon a heape, being strongly coagulated, compressed and compacted, which indeauouring vpwards, is forcibly beaten backe, and he also being intercepted betwixt two clowdes of a contrary nature (as hot & cold) by violence of mouing, is fired. now the highest part by reason of the subtilitie ascending vpwards appeareth as the dragons necke seeming many times by occasion of that smoking fume, to vomit flames, sparckles and such like out of his mouth, and by reason of the repulse that it was lately in, there is exhibited

the

the belly of the Dragon, the latter part more nere to the colde doth appeare like vnto the taile, because it is the propertie of cold to binde, but the Dragon vanisheth, the fume is dispersed.

It is called Draco volans, or the flying Dragon, quod volare videatur, for it being fired, either is moued of it selfe or propelled by the cold of the middle region, so that it seemes to flie and bee transferred from one place into another in the lowest region, and if it also meete with a cold cloud, it is tourned back to the terrour of the beholders, the vulgar call it a fire drake.

But happily some will say the image of no liuing thing can be impressed and apparant in the aire, of such I demand how the Image of Charles the Emperour not long since was represented, so that the beholders put off their hattes, thinking it the Emperour himselfe, the like was of Fredricke Prince Elector of Sarony, when prisoner with the Emperour, also more late hath beene seene Armies of men, battels, inuasiõs, Crownes horses, sea and Angels with crosses &c. represented in the aire, and as those may naturally happen, so may they also be artificially made by certaine glasses and instruments according to the art. Catroptrice, of which a little credit may be won by these homely perspectiues, commonly to be sold in London.

Of the foure times of pleading, called Termes, and of their retournes, and other daies necessarie to be knowne, and not vnmeete for any to publish.

FOr the hearing and determining of all kinde of contracts discords, and such like in the common weale, there be foure times in the yeare appointed, and those be called Termes, the rest is vacation or void time to intend other affaires.

Euery terme consisteth of 4. 5. or 8. retournes, euery returne of

of. 4. dayes, and euery day seruing to a seuerall purpose.

First, it is to be noted, that euery Terme hath but parte of all of these .6. kind of Returnes: vz. Crastino. Octabis; Quindeno, tres, menle, and Quinque: euery of which Returnes, hath his Basis, from whence they take denomination & bee reckoned. the signification of these 6 kind of returnes is thus. Crastino is the morrow after the Basis or day nominated, as Crast. Trinitatis is the morrow after Trinity sunday: Trinity Sundaye giuing denomination and being the Basis to count the nert day from Octab is .8. dates after inclusiuely. Quind. is .15. dayes after the Basis or day of nomination. Tres, that day three weekes: Menle, that day month, & quinq. that day .5. weekes: Euery of these Returnes hath .4. seuerall dayes whereupon it consisteth: The first whereof hath a double signification: the one is the day of the returne, and the other the day of the Essoynes for the defendant in a personall action, or the Tenant in a reall action to be Essoyned: The 2. is the day of exceptions. for the plaintife or demaundant to lay an exception if no Essoyne be cast, that the defendant shall not be essoyned: The .3. is Returna brevium, that is, the day whereon the Shirife must returne the Writ: and the .4. is the day of Apparance for Parties & Jurors in the Courte of common Pleas, the which first and last day of Apparance in euery terme, do determine and limit the beginning and ending of the said terme.

If any of these daves fall vpon a Holy day it is not Court-day: or vpon a Sunday: as in Easter and Trinity terme they alwayes doe, then the nert day following must serue for both, as if the essoyne day fall vpon a Sunday, then Monday must serue for the essoyne day and day of exception both, and so of all the other returnes.

These daves haue most vse in the Court of cõmon Pleas, where all lites commence by originall &c. But for Latitas or other Processe vpon their Bill, it is vpon a day certaine, as Die Lune proxi. post Purifi. which must alwayes be reckoned from the essoyne day.

In the Starre chamber, Chauncery, Court of Wardes and Court of Requests, they haue vse of none of these Returnes, but onely the day of Apparance, which is quarto die post.

Vse

Yet note well, if a Capias, Exigent, Firifacias, or Distringas be executed after the day of Essoyne by the Shiriffe, or a Comission Seate vpon out of the foresaid Courtes after the said Essoyne day, it is neyther iustifiable nor warrantable.

Furthermore, the Termes bee fixed or mooueable: they be called mooueable, for that they follow the course and primations of the Moone, which determines the mooueable Feastes that be their Basis, hereby Easter and Trinity Termes bee mooueable, for that they haue not any fixed place in the Kalender: Hillary and Michaelmas haue, and therefore fixed.

How a man may iourney from any notable Towne in England to the City of London, or from London to any notable towne in the Realme.

The way from Walsingham to London.

FRom Walsingham to Picknam	xii. mile
From Picknam to Brandonfery	x. mile
From Brandonfery to Newmarket	x mile
From Newmarket to Braban	x mile
From Braban to Barkeway	x. mile
From Barkeway to Puckrich	vii. mile
From Puckrich to Ware	v. mile
From Ware to Waltham	viii. mile
From Waltham to London	xii. mile

A Prognostication

From Barwicke to Yorke, and so to London.

From Barwicke to Bedford	xii.mile
From Bedford to Anwicke	xii.mile
From Anwicke to Morpit	xii.mile
From Morpit to Newcastell	xii. mile
From Newcastell to Durham	xii mile
From Durham to Darington	xiii.mile
From Darington to Northalerton	xiiii mile
From Northalerton to Toplife	viii.mile
From Toplife to Yorke	xvi.mile
From York to Tadcaster	viii mile
From Tadcaster to Wentbridge.	xii. mile
From Wentbridge to dancaster	viii.mile
From dancaster to Tutford	xvii.mile
From Tutford to Newarke	x,mile
From Newarke to Grantham	x,mile
From Grantham to Stamford	xvi,mile
From Stamford to Stilton	xii,mile
From Stilton to Huntington	ix,mile
From Huntington to Royston	xv,mile
From Royston to Ware	xii,mile
From Ware to Waltham	viii,mile
From Waltham to London	xii mile.

From Carlile to Dancaster, and so to London.

From Carlile to Walket yate	viii.mile
From Walket yate to Pirath	viii,mile
From Pirath hardby to Apulby	x,mile
From Apulby to Burgley	vi.mile
From Burgley to the Spittle	viii,mile
From the Spittle to the Bowes	viii.mile
from the Bowes to Grethaw bridge	iiii,mile
from Grethawbridge to Catrike bridge	x,mile
from Catrike bridge to Limon	vi,mile
from Limon to Borow bridge	xii.mile

From

From Borow bridge to Wetherby viii.mile
From Wetherby to Aberforth v.mile
From Aberforth to Ferrybridge vii.mile
From Ferribridge to Doncaster x.mile
From Doncaster to London as afore.

From Carnaruan to Chester, and so to London.

From Carnaruan to Conway xviii.mile
From Conway to Dimbigh xii.mile
From Dimbigh to Flint xii.mile
from Flint to Chester x.mile
from Chester to Nich xiiii.mile
from Nich to Stone x.mile
from Stone to Lichfield xvi.mile
from Lichfield to Colall xii.mile
From Colall to Couentree viii.mile

And so from Couentree to London, as hereafter followeth.

From Cokermouth to Lancaster, and and so to London.

From Cokermouth to Kilwike vi.mile
From Kilwike to Grocener viii.mile
From Grocener to Kendale xiiii.mile
from Kendale to Burton vii.mile
from Burton to Lancaster viii.mile
from Lancaster to Preston xx.mile
from Preston to Wigam xiiii.mile
from Wigam to Warington xx.mile
from Warington to Newcastell xx.mile
from Newcastell to Lichfield xx.mile
from Lichfield to Couentre xv. mile
from Couentree to Dunstree xiiii mile
from Dunstree to Towcester x.mile
from Towcester to Stonistratford vi mile
from Stonistratford to Brickhill vii mile
from Brickhill to Dunstable vii mile

From Dunstable to Saint Albones x.mile
From Saint Albones to Barnet x.mile
From Barnet to London x mile

From Yarmouth to Colchester, and so London.

From Yarmouth to Beccles viii.mile
From Beccles to Blybour vii.mile
From Blybour to Snapbridge viii.mile
From Snapbridge to Woodbridge viii.mile
From Woodbridge to Ipswich v.mile
From Ipswich to Colchester xii mile
From Colchester to Eastford viii mile
From Eastford to Chelmsford x.mile
From Chelmsford to Brentwood x.mile
From Brentwood to London xv.mile

From Douer to London.

From Douer to Canterburie xii.mile
From Canterburie to Sittingborne xii.mile
From Sittingborne to Rochester viii.mile
From Rochester to Grauesend v,mile
From Grauesend to Datford v,mile
From Datford to London. xii.mile

From Saint Burien in Cornwall to London.

From Saint Burin to the Mount xx mile
From the Mount to Thury xii mile
From Saint Thury to Bodman xx.mile
From Bodman to Launton xx.mile
From Launton to Dcampton xv.mile
From Dcampton to Crokehornewell x.mile
From Crokehornewell to Exceter x.mile
From Exceter to Honiton xii.mile
From Honiton to Charde x,mile

From

From Charde to Crookehorne viii.mile
From Crookehorne Shirborne x.mile
from Shirborne to Shaftsbury x.mile
from Shaftsbury to Salesbury xviii.mile
from Salesbury to Andouor xv.mile
from Andouor to Basingstocke viii mile
from Basingstocke to Hartlorow viii.mile
from Hartlorow to Bagshot viii.mile
from Bagshot to Staines viii.mile
from Staines to London xv.mile

From Bristow to London.

From Bristow to Maxfield x.mile
from Maxfield to Chapnam x.mile
from Chapnam to Marleborough xv.mile
from Marleborough to Hungerford viii.mile
from Hungerford to Newbury viii.mile
from Newbury to Reading x.mile
from Reading to Maidenhead x.mile
from Maidenhead to Colbrooke viii.mile
from Colbrooke to London xv.mile

From Saint Dauids to London.

From Saint Dauids to Axford xx.mile
from Axford to Carmarden x mile
from Carmarden to Newton x.mile
from Newton to Lanbury x.mile
From Lanbury to Brecknocke xvi mile
from Brecknocke to Hay x.mile
from Hay to Harford xiii mile
from Harford to Rosse ix mile
from Rosse to Glocester xii.mile
from Glocester to Cicester xv.mile
from Cicester to Farington xvi.mile
from Farington to Abington vi.mile
from Abington to Dorchester vii.mile
from Dorchester to Henley xii.mile
from Henley to Maidenhead viii mile
from Maidenhead to Colbrooke viii mile
from Colbrooke to London. xv.mile.

A perfect Table of Tearmes and their returnes, with essoine daies, daies of exception Returna breuium, day of appearance, and Starre-chamber dayes,

The place of the moueable Tearmes &c. this yeare in the Kalender.

	The returne dayes or daies of Essoine		Daies of exception,	Returna breuium,	Daies of appearance.
Easter tearme	Quind Pasch.	Apr. 23.	Apr. 23, a	Apr. 24 b	Apr. 25. c
	Tres. Pasche,	Apr. 30,	Apr. 30. a	Ma. 1, b	May. 2. c
	Mense, Pasche,	May. 7,	May. 7. a	Ma. 8. b	May. 9. c
	quinq; Pasche,	Ma. 14	May. 14 a	Ma. 15. b	May. 16. c
	Crastin. Ascen,	Ma. 18,	May. 19. f	Ma. 21. a	May. 21. a

Starre chamber dayes, April 27. May. 2. 4. 9, 11. 16 18. 22.

Trinity tearme.	Crast. Trin,	Jun. 4 a	June. 5. b	June 6. c	June. 7,
	Octab. Trin.	Jun. 11 a	June. 11 a	Jun. 12. b	June. 13 c
	Quid. Trin,	Jun. 18 a	June 18 a	Jun. 19. b	June. 20, c
	Tres. Trin.	Jun. 25 a	June. 25, a	Jun. 26. b	June. 27. c

Starre chamber dayes, June. 8. 13. 15. 20. 22. 27. 28.

The place of the two fixed tearmes &c. in the Kalender this yeare.

Hillary tearmes	Octab. Hillar.	Janu. 20. f	Janu. 22. a	Janu. 22.	Janu. 23 b
	Quind Hillar.	Janu. 27. f	Janu. 29. a	Janu. 29,	Janu. 30. b
	Crast. Purific.	Feb. 3. f	Feb. 5. a	Feb. 5.	Feb. 6, b
	Octab. Purific.	Feb. 9, c	Feb. 10. f	Feb. 12. a	Feb. 12. a

Starre-chamber dayes, Janu. 24. 26. 31. Feb. 2. 7. 6. 13.

Mich.	Octab. Mich.	Octob. 6. f	Oct. 8 a	Oct. 8: a	Oct: 9: b
	quind. Mich;	Oct. 13 f	Oct. 15: a	Oct: 15: b	Oct: 16. b
	Tres. Mich,	Octo. 20 f	Oct. 22: a	Oct: 22: a	Oct: 23. b
	Mens. Mich.	Octo. 27 f	Oct. 29. a	Oct: 29. a	Oct: 30: b
	Crast. Mich.	Nou. 3 f	No: 5: a	No: 5: a	No: 6: b
	Crast. Mich,	Nou. 12 a	No. 13: b	No. 14. c	No: 15: b
	Octa. Mich,	Nou. 19 a	No: 19: a	No: 20. b	No: 21, c
	Quind. Mich.	Nou. 26 a	No: 26: a	No: 27: b	No: 28: c

Starre chamber dayes: Octob: 10: 12: 17: 19: 24: 26: 31:
Nouem: 7: 9: 14: 16: 21, 23: 28, 29:

Astronomicall Obseruations for this yeare, 1610.

The true precession of the Æquinoctial this yeare, deg. 28 10. seconds. 48, 2. sec. 14, 3. sec.

The greatest obliquity of the Zodiacke, is Grad. 23, 28. 1, sec. 2, sec. 16, 3 tec.

The Eccentricity of the Sunne. 32:09. part, whereof, the Semidiameter of the Eccentricity, is 1000000. part. or part. 1, 53, 1, sec. 57, 2. tec 12, 3 sec. of which the Semidiameter conteynes, 60 part.

			deg:	1. sec	2. sec.
The Apogeon of the. 6. Planets	Sol	Cancer	9	42	1. 5.
	Saturne.	Sagit	29.	35,	12
	Iupiter	Libra.	6.	37.	11
	Mars.	Leo.	23.	47.	41
	Venus.	Geminj.	16	31.	48
	Mercury.	Sagit.	0.	37.	53

The quantity of the Tropicall yeare, is Dayes, 365, hor. 5 minu. 53. sec. 32. tect. 39.

Vtor quando placet, corrige quando licet.

To the *Virilitigatores* and *enuious Carpers, & to the* Pseudologus and *Pseudomartyrs*, and to *no other*.

Ambition, view with thy infectious eye
These Lines, that to each morning Mate replye,
And let thy braynes contagious enuy beade,
Whereby thy eyes do blast each thing they reade.
Yet are my Lines with Laurell shrowded ere,
That they respect such Thunder-boltes no more:
All is my owne, that here is done or writt,
I scorne to borrow from the barren witt.
And he that frownes, or takes ought in ill sorte,
May prooue a Foole, but dooth the Booke no hurt.
If Buzzard Kites, that nere durst view the Sunne,
Shall teach *IOVES* Eagle what is to be done.
Then let the Flye perch likewise by his neast,
Since chattering Paye, can teach him what is best.
But, if such Dogges lye snarling in the Hay,
And eate of none, yet would none should away.
I must needes course them, though against my minde,
For mungrell Curres will bite a man behinde.
Yet (Woman-like,) lets not (for shame) go scolde,
Least Standers by iudge both might be controlde.
Striue to do well, good Workes themselues will praise,
Pure Wine doth neede no Garland now a dayes.
Yet thus I say, before I do conclude,
Tis base to imitate a Worke thats rude.
I ayme at none, but such that rou'd at mee,
If none such are, these Verses silent bee.

Arthur Hopton.

Finis.